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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,910	11/20/2001	Richard B. LeVine	ECD-0003	1783

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EXAMINER

CHAI, LONGBIT

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,910

Applicant(s)

LEVINE ET AL.

Examiner

Longbit Chai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for benefit of domestic priority under 35 U.S.C. 119(e) is acknowledged.

The application is filed on 12/28/2000 but has a series of provisional applications and the earliest U.S. provisional application number 60/234,567 is filed on 9/22/2000.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 30 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claim limitation of claim 30 "interleaving and encrypting each status message before transferring the status message" is not enabled by the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 7 and 24 – 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Mooney (Patent Number: 6351813).

As per claim 1, Mooney teaches a method for preventing unauthorized use of digital content data to be transferred from a first system to a second system comprising:

locating an archive of a digital content data at the first system (Mooney: see for example, Column 1 Line 59 – Column 2 Line 12);

determining transaction data of the second system (Mooney: see for example, Column 2 Line 3 – 4);

determining whether the transaction data of the second system indicates whether the second system is a valid recipient of the archive (Mooney: see for example, Column 2 Line 5 – 6); and

transferring the archive from the first system to the second system if the second system is a valid recipient (Mooney: see for example, Column 2 Line 7 – 11).

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As per claim 2, Mooney teaches the claimed invention as described above (see claim 1). Mooney further teaches if the second system is not a valid recipient, transferring the archive from the first system to the second system, the operation of the archive failing in the second system (Mooney: see for example, Column 2 Line 5 – 6).

As per claim 3, Mooney teaches the claimed invention as described above (see claim 1). Mooney further teaches the first system comprises a hard media and wherein the second system comprises a computer system (Mooney: see for example, Figure 1).

As per claim 4, Mooney teaches the claimed invention as described above (see claim 1). Mooney further teaches the first system comprises a first computer system and wherein the second system comprises a second computer system (Mooney: see for example, Figure 1 and Column 1 Line 47 – 67).

As per claim 5, Mooney teaches the claimed invention as described above (see claim 4). Mooney further teaches the first and second computer systems are remotely located. (Mooney: see for example, Column 1 Line 51 – 52).

As per claim 6, Mooney teaches the claimed invention as described above (see claim 1). Mooney further teaches determining transaction data of the second system comprises determining a data element selected from the group of data elements

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consisting of: transaction identification; system configuration information; manufacturer, serial number, and physical properties (Mooney: see for example, Column 2 Line 6).

As per claim 7, Mooney teaches the claimed invention as described above (see claim 1). Mooney further teaches determining transaction data of the second system comprises downloading an analysis tool to the second system, and running the analysis tool to examine the second system and to generate a unique identifying value that identifies the second system as the transaction data (Mooney: see for example, Column 5 Line 27 – 29).

As per claim 24 and 28, Mooney teaches a method for preventing unauthorized use of digital content data hosted on a system comprising:

determining whether an unauthorized use of the digital content data is in progress (Mooney: see for example, Column 5 Line 31 – 40 and Column 1 Line 59 – Column 2 Line 12: the attempt to retrieve the key for encryption / decryption the digital data need to be authenticated, as taught by Mooney, to prevent unauthorized access); and

in the case where an unauthorized use is determined, initiating a defense action by disabling an input device (Mooney: see for example, Column 5 Line 48 – 50);

As per claim 25, Mooney teaches the claimed invention as described above (see claim 24). Mooney further teaches disabling an input device comprises disabling a

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combination of keystrokes at a keyboard input device (Mooney: see for example, Column 5 Line 48 – 50: the entire system is locked out to prevent further access by the user).

As per claim 26, Mooney teaches the claimed invention as described above (see claim 24). Mooney further teaches disabling the input device with regard to user interface windows related to the unauthorized use (Mooney: see for example, Column 5 Line 48 – 50: the entire system is locked out to prevent further access by the user).

As per claim 27, Mooney teaches the claimed invention as described above (see claim 24). Mooney further teaches the input device comprises a keyboard or a mouse (Mooney: see for example, Column 5 Line 48 – 50: the entire system is locked out to prevent further access by the user).

As per claim 29, Mooney teaches the claimed invention as described above (see claim 28). Mooney further teaches the status messages further relate to authorized use (Mooney: see for example, Column 5 Line 55 – 57).

4. Claims 21 – 23 and 32 – 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsu (Patent Number: 6351813).

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As per claim 21 and 32, Hsu teaches a method for preventing unauthorized use of digital content data hosted on a system comprising:

examining system devices that are operating in the system (Hsu: see for example, Column 2 Line 55 – 62);

determining whether any of the system devices are emulator devices (Hsu: see for example, Abstract Line 3 – 4); and

initiating a defense action, in event that an emulator device is operating on the system (Hsu: see for example, Abstract Line 5 – 13).

As per claim 22, Hsu teaches the claimed invention as described above (see claim 21). Hsu further teaches the system devices comprise physical devices or logical entities (Hsu: see for example, Figure 1).

As per claim 23, Hsu teaches the claimed invention as described above (see claim 21). Hsu further teaches the emulator devices comprise hardware-based emulator devices or software-based emulator devices (Hsu: see for example, Column 4 Line 56 – 58).

As per claim 33, Hsu teaches the claimed invention as described above (see claim 32). Hsu further teaches the function is a non-defensive function (Hsu: see for example, Abstract Line 8 – 13).

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As per claim 34, Hsu teaches the claimed invention as described above (see claim 32). Hsu further teaches the defense action comprises reading and writing data values critical to system operation repeatedly to a decoy process (Hsu: see for example, Abstract Line 8 – 13).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney (Patent Number: 6351813), in view of Cialelli (Patent Number: 6236727).

As per claim 8 and 10, Mooney teaches the claimed invention as described above (see claim 7 and 1 respectively). Mooney does not disclose expressly the unique identifying value is deposited in the archive that is transferred to the second system.

Cialelli teaches the unique identifying value is deposited in the archive that is transferred to the second system (Cialelli: see for example, Column 6 Line 41 – 45: deposited is equivalent to scrambled / interleaved).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cialelli within the system of Mooney

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because Cialelli teaches enhancing the security for digital content data by using extensive encryption in order to protect the data against unauthorized access (Cialelli: see for example, Column 1 Line 47 – 51).

As per claim 9, Mooney as modified teaches the claimed invention as described above (see claim 8). Cialelli further teaches the unique identifying value is encrypted and interleaved with the digital content data in the transferred archive (Cialelli: see for example, Column 6 Line 41 – 45).

As per claim 11, Mooney as modified teaches the claimed invention as described above (see claim 10). Cialelli further teaches increasing a memory allocation of the archive before modifying the archive with the transaction data (Cialelli: see for example, Column 6 Line 41 – 45: the memory allocation of the archive must be increased due to combing the encrypted keys into the data).

As per claim 12, Mooney as modified teaches the claimed invention as described above (see claim 11). Cialelli further teaches creating a map of the increased memory allocation (Cialelli: see for example, Column 6 Line 41 – 45: the memory allocation of the archive must be increased due to combing the encrypted keys into the data).

As per claim 13, Mooney as modified teaches the claimed invention as described above (see claim 12). Cialelli further teaches storing the map in the archive, or in

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memory locations of the second system, or in the first system (Cialelli: see for example, Column 6 Line 41 – 45: the memory map must be used in order to operate the system properly).

As per claim 14, Mooney teaches the claimed invention as described above (see claim 1). Mooney does not disclose expressly before transferring the archive, removing a plurality of original data segments from memory locations of the archive and storing false data at the memory locations.

Cialelli teaches before transferring the archive, removing a plurality of original data segments from memory locations of the archive and storing false data at the memory locations (Cialelli: see for example, Column 2 Line 44 – 50: any data other than the clear data is interpreted as the false data).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Cialelli within the system of Mooney because Cialelli teaches enhancing the security for digital content data by using extensive encryption in order to protect the data against unauthorized access (Cialelli: see for example, Column 1 Line 47 – 51).

As per claim 15, Mooney as modified teaches the claimed invention as described above (see claim 14). Cialelli further teaches storing the original data in the archive, or in memory locations of the second system, or in the first system (Cialelli: see for example, Column 2 Line 32 – 34).

As per claim 16, Mooney as modified teaches the claimed invention as described above (see claim 15). Cialelli further teaches generating a map of the memory locations (Cialelli: see for example, Column 2 Line 32 – 34: the memory map must be used in order to operate the system properly).

As per claim 17, Mooney as modified teaches the claimed invention as described above (see claim 16). Cialelli further teaches storing the map in the archive, or in memory locations of the second system, or in the first system (Cialelli: see for example, Column 2 Line 32 – 34: the memory map must be used in order to operate the system properly).

As per claim 18, Mooney as modified teaches the claimed invention as described above (see claim 14). Cialelli further teaches the false data comprises a machine instruction that initiates an abnormal condition in the digital content data when processed (Cialelli: see for example, Column 2 Line 44 – 50: the process of encrypted data (i.e. other than clear data) would cause a machine instruction initiating an abnormal condition).

As per claim 19, Mooney as modified teaches the claimed invention as described above (see claim 14). Cialelli further teaches the second system, following transfer of the archive, replaces the false data with the original data segments if the second system

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is a valid recipient (Cialelli: see for example, Column 2 Line 64 – 67: the transferred encrypted data can only be decrypted properly if the second system is a valid recipient).

As per claim 20, Mooney as modified teaches the claimed invention as described above (see claim 19). Cialelli further teaches the second system replaces the false data by the original data segments immediately prior to execution of the corresponding memory locations, and replaces the original data by the false data immediately following execution of the corresponding memory locations (Cialelli: see for example, Column 2 Line 44 – 66: These are the scrambled, decrypted and re-scrambled techniques as taught by Cialelli).

6. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mooney (Patent Number: 6351813).

As per claim 30, Mooney teaches the claimed invention as described above (see claim 28). Mooney does not disclose expressly interleaving and encrypting each status message before transferring the status message. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Mooney to accommodate the need because encryption is one of the well-known security techniques.

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As per claim 31, Mooney teaches the claimed invention as described above (see claim 28). Mooney does not disclose expressly the status messages are temporarily stored at a virtual memory location on the system. However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Mooney to accommodate the need because the virtual memory is one of the well-known design choices in computer memory technique.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788.


The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai
Examiner
Art Unit 2131

LBC


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